

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
18 December 2003 (18.12.2003)

PCT

(10) International Publication Number  
WO 03/103770 A2(51) International Patent Classification<sup>7</sup>: A61P 15/08,  
A61K 38/09, 38/24

(21) International Application Number: PCT/NL03/00370

(22) International Filing Date: 6 June 2003 (06.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 02077221.6 7 June 2002 (07.06.2002) EP

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— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF CONTROLLED OVARIAN HYPERSTIMULATION AND PHARMACEUTICAL KIT FOR USE IN SUCH METHOD

WO 03/103770 A2

(57) **Abstract:** One aspect of the present invention is concerned with a method of controlled ovarian hyperstimulation in a mammalian female, said method comprising the co-administration to said female of - a substance having follicle stimulating hormone activity (FSH substance) in an amount effective to stimulate multiple follicular development; - gonadotropin releasing hormone (GnRH) antagonist in an amount equivalent to a daily subcutaneous dose of at least 0.5 mg ganirelix to prevent a premature LH-surge; and - a LH substance in an amount effective to prevent or suppress symptoms of luteinising hormone (LH) deficiency resulting from the administration of the GnRH antagonist; followed by administering a meiosis and luteinisation inducing substance (ML substance) in an amount effective to stimulate resumption of meiosis and luteinisation, and wherein the LH substance is not obtained from the urine of human females. Another aspect of the invention relates to a pharmaceutical kit for use in a method of controlled hyperstimulation, which kit comprises: - at least one parenteral or oral dosage unit containing one or more FSH substances in an amount equivalent to a subcutaneous dose of 50-1500 I.U. FSH; - at least one parenteral dosage unit containing one or more GnRH antagonists in an amount equivalent to a subcutaneous dose of 0.5-25 mg ganirelix; - at least one parenteral dosage unit containing one or more LH substances in an amount equivalent to a subcutaneous dose of 50-3000 I.U. recombinant LH; wherein the LH substance is not obtained from the urine of human females.